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MADRAS RECORD OFFICE.

Government of Madras.

Public Works

DEPARTMENT.

G.O. No. 2456

Press
Mis.

551-552

Dated 23 8

1865.

Not to be folded or roughly handled

No. 551. Read the following Circular from Lieutenant-Colonel C. H. DICKENS, R. A., Secretary to the Government of India, Public Works Department, (Military Works,) dated Simla, 13th July 1865, No. 67 :—

Governments of Madras, Bombay, Bengal, N. W. P., and Punjab.
Governor, Straits Settlements.
Chief Commissioners, Central Provinces, British Burmah, and Oudh.
Commissioner of Mysore.
Resident at Hyderabad.
Agents of the Governor General for Central India and Rajpootana.

Copy of the following correspondence forwarded for information to the Local Governments and Administrations marginally noted.

Copy forwarded to the Military Department, Quarter Master General and Adjutant General.

(Signed) A. B. SAMPSON,
Asst. Secy. to the Govt. of India.

Extract paragraph 2 of a letter from the Resident, Hyderabad, in the Public Works Department, to Secretary to Government of India, Public Works Department, No. 142, dated 10th January 1865.

"PARA. 2.—The first estimate, No. 13, provides for a method of keeping out the rain from the ridge ventilators of the barracks occupied by the 2nd European Regiment and Artillery at Trimulgherry, and amounts to Rupees 5,891. The plan at first adopted of fixing boards against the sides of the openings was an objectionable one, as it interfered with the ventilation, besides being ineffectual in other respects ; as perforated zinc has been found to answer very well for what is required, an estimate for the works has been prepared accordingly, and is recommended to be passed."

No. 248 M, dated 8th March 1865.

From Lieutenant-Colonel C. H. DICKENS, R. A., Secretary to Government of India, Public Works Department, to Resident at Hyderabad.

With reference to the estimate submitted with your Secretary's letter No. 142, dated 10th January 1865, for perforated zinc sides to the ridge ventilators in the Artillery and Infantry Barracks at Trimulgherry, I am directed to state that although there is no doubt that rain will be kept out by this means, it is thought that free ventilation will be obstructed.

2. Before passing orders upon the present proposal, I am to enquire how the boarding objected to, was fixed to the sides of the ventilators, and whether it is the usual inclined lower boarding which generally answers perfectly in keeping out the rain.

No. 176, dated 10th April 1865.

From Captain G. PRICE, Secretary to Resident of Hyderabad, in the Public Works Department, to Secretary to Government of India, Public Works Department.

I have the honor, under instructions from the Resident, to acknowledge the receipt of your Despatch No. 248 M, dated 8th ultimo, and to furnish as therein requested, the following explanation given by the Executive Engineer, Secundera-

*Proceedings of the Madras Government, Public Works Department,
23rd August 1865.*

bad Division, regarding the proposed use of perforated zinc for the ridge ventilators of barracks at Trimulgherry:—

"The wood, although six inches opening was left, obstructs ventilation more than the zinc does, at the same time that it is quite ineffectual to keep out rain: the dotted lines show how rain falling at different angles will drive in even if only an inch of space be left. Complaints came in succession from Regiments occupying buildings with this style of roof, and a trial of zinc was made about two years ago on a small guard-house occupied by Europeans. After the monsoon, the Officer Commanding reported the remedy to be quite successful, and then the same was put on other buildings. In the course of few months complaints were received in respect to every one of the standard plan barracks with tiled roofs, whether defended by wood or not, hence the present estimate.

"I believe that fixed louvres at that height where monsoon rain is driven not only horizontally but sometimes up by a strong wind, would be quite useless, and a similar opinion probably induced the Executive Engineer to apply solid planks. I do not think, moreover, that the expense of louvres would be less than zinc in frames. I may add that, in barracks finished later than those from which the drawing is taken, there is a greater lap (one foot) of the main roof and ridge tiling, but still the rain enters."

2. I am directed to state that, as the experiment made by the Executive Engineer was found to be so successful, and considered not to check ventilation in any perceptible degree, he was allowed to proceed with the work accordingly on emergency.

No. 25, dated 19th June 1865.

From Captain G. PRICE, Secretary to Resident at Hyderabad, in the Public Works Department, to Secretary to Government of India, Public Works Department.

1. I have the honor, under instructions from the Resident, to acknowledge the receipt of your letter No. 509 M, dated the 15th ultimo, conveying sanction to an estimate for applying perforated zinc to the sides of ridge ventilators in the barracks at Trimulgherry.

2. I am directed to enclose the copy of a letter received from the Deputy Inspector General of Hospitals, Hyderabad Subsidiary Force, reporting very favorably upon the use of this material, and also the copy of a docket received from the Executive Engineer, Secunderabad Division, regarding the durability of the zinc, though sufficient time has not elapsed yet for forming any reliable opinion upon this point. The Chief Engineer, I am to observe, is of opinion that the zinc will be found very durable even were it much less protected from the rain than it is, under the eaves of the roof, but it is necessary, he thinks, that the material should, for obvious reasons, be secured with zinc nails and not iron screws as happens to have been the case here, because the former were not procurable when wanted. The Executive Engineer, however, has been ordered to use zinc nails for the future.

No. 218, dated 8th June 1865.

From J. A. MAULE, Deputy Inspector General of Hospital, to General Officer Commanding Hyderabad Subsidiary Force.

1. With reference to the letter from the Secretary to the Government of India, to the Resident, Hyderabad, dated Public Works Department, Simla, 15th May 1865, No. 509, on the subject of perforated zinc being introduced into ridge ventilation of public buildings, I desire very strongly to recommend the measure.

*Proceedings of the Madras Government, Public Works Department,
23rd August 1865.*

2. In those buildings, deficient in this article (though the upper roof laps considerably over the lower), in very severe weather, the rain still finds access, and in buildings appropriated as hospitals; when quiet is particularly needed, the birds that fly in and out with materials to form nests are a constant source of annoyance.

3. Perforated zinc has lately been substituted for glass in some of the door-frames of the Artillery Hospital at this station, and as regulating temperature with the happiest effects.

4. I am of opinion that it forms a most desirable adjunct to the health and comfort of the men occupying public buildings.

No. 193, dated 13th June 1865.

Memorandum from Major G. R. PHILLIPS, Executive Engineer, Secunderabad Division, to Chief Engineer, Hyderabad, in the Public Works Department.

Replies to his No. 292, dated the 12th June, and to former letters, states that there appears no question about the durability of the zinc. Screen-zinc is a metal usually chosen in preference for work exposed to weather, because after undergoing a slight superficial oxidation, it remains for years without further corrosion. As to the way of fitting it by fixing it in a frame of wood by screws with washers under it never works loose at the screw holes, and the wood frame which is narrow and in itself sufficiently stiff, is firmly fixed to the rafters by screws and is bedded in mortar below.

No. 552. ORDER THEREON, 23rd August 1865, No. 2,456.

MILITARY WORKS, No. 45.

Ordered to be recorded.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,

Secretary to Government.

Exd. S. T. Augustin.

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Forth George
23rd August 165

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Pro. of Govt. for August
No 3004

Military Works.

CIRCULAR No. 67.

To

FROM
SECY. TO GOVT. OF INDIA,
IN THE PUBLIC WORKS DEPT.

Dated SIMLA, 13th July, 1865.

Received *12 Aug.*

Print
18-8-65

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Application of perforated zinc to ridge ventila-
tors in Barracks.

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